

## **Guidelines For Habitat Improvement Projects**

	Gambel's Quail Callipepla gambelii	Scaled Quail Callipepla squamata	Mearns' Quail Cyrtonix montezumae	Masked Bobwhite Colinus virginianus ridgwayi
Statewide Distribution				
Space	Brushy drainages dominated by mesquite, acacia, palo verde, skunkbush, littleleaf sumac, and various cactus species	Mixed desert grasslands or shrublands with open, level-to-rolling habitat. Avoids pure grasslands, particularly stands of introduced aggressive grass species	Heavily tied to oak-grassland or pine-grassland savannahs	Floodplains of riparian areas and grassy plains. Prefer dense stands of perennial grasses
Diet	Seeds, insects including prickly pear deervetches, filaree mesquite seeds and leaves jojoba seeds tansymustards ragweeds	Seeds, insects including milkvetch morning glory deervetch lupine snakeweed Russian thistle seeds of woody plants like mesquite, acacias and spiny hackberry various grass seeds	Bulbs, tubers, insects including • yellow nutsedge • Gray's woodsorrel • acorns	Seeds, insects including gramas three-awn legumes, Johnson grass



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Key Plants for loafing, roosting, and nesting	<ul> <li>wolfberry</li> <li>desert thorn</li> <li>desert or spiny hackberry</li> <li>Fremont barberry</li> <li>live oak</li> <li>catclaw acacia</li> <li>grasses for nesting cover</li> </ul>	<ul> <li>areas that lack high interspersion of shrubs</li> <li>grasses and forbs</li> <li>bare ground; roost and nest on ground</li> <li>nests are usually associated with bunch grass and a guard object, such as prickly pear or yucca</li> </ul>	<ul> <li>perennial bunchgrass species associated with slope or adjacent ground structure such as a tree or a boulder are most often used for nesting cover</li> <li>high grass diversity and grass cover</li> <li>tree overstory of oak or pine</li> </ul>	<ul> <li>snakeweed</li> <li>mesquite</li> <li>coarse bunch grasses; diversity is very important</li> </ul>
% of Tree or Brush Canopy Cover	>40%	10-25%, brush cover less than 5 feet tall	25-50%, tree cover	10-30%
% of Grass Canopy Cover	30-50%	30-50%	>60%	12-15%
Distance Between Cover	40-50 yards	60 yards	5-15 yards	50-75 yards
% of Annual Growth Grazed	<50%	<50%	<50%	10%
Home Range and Movement	<ul> <li>20-94 acres per covey</li> <li>maximum yearly movement of coveys usually less than 1.2 mi</li> </ul>	<ul> <li>winter ranges vary from 175.4 to 519.0 acres in western Texas</li> <li>summer ranges are larger, with a reported range of 719.1 to 2,179.5 acres</li> </ul>	• 14.9 acres per covey	<ul> <li>averaged 4 acres         per covey</li> <li>generally exhibit         short-distance         movements</li> </ul>
Breeding Season	Spring and summer, heavily dependent on winter rainfall	Spring after wet winters and after monsoons started	After summer monsoon	June-August, depending on rain



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